

Notice of Allowability	Application No.	Applicant(s)	
	10/035,906	PENN, STEVEN M.	
	Examiner	Art Unit	
	Mark Consilvio	2872	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/18/2005.
2. ☒ The allowed claim(s) is/are 6-9 and 31 (and have been renumbered 1-5).
3. ☒ The drawings filed on 22 April 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| <ol style="list-style-type: none"> 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____ |
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DETAILED ACTION

Status of Claims

Based on the amendment filed 4/18/2005, claims 1-5 and 10-22 have been canceled and claims 6-9 and 23-30 are currently pending.

Election/Restrictions

Newly submitted claims 23-30 are directed to an invention that is independent or distinct from the invention originally claimed:

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 6-9 and 23, drawn to an optical component, classified in class 359, subclass 833.
- II. Claims 24-30, drawn to a method of using an optical modulator, classified in class 359, subclass 298.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the product as claimed can be used in a materially different process such as a system of illumination without modulation.

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Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

This application also contains claims directed to the following patentably distinct species of the claimed invention:

Species A, corresponding to the embodiment as shown in fig. 7;

Species B, corresponding to the embodiment as shown in fig. 4.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 23-30 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Examiner's Amendment

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Charles Brill (Reg. No. 37,786) on 6/23/2005.

The application has been amended as follows:

6. (Currently amended) An optical assembly ~~component~~ comprising:

a first element having ~~at least one substantially planar surface~~ a generally cylindrical shape, a generally circular base, and a conical indentation within the cylindrical shape that serves as a total internal reflection element for light from the perimeter of the cylindrical shape incident the conical indentation at greater than the critical angle; and

a lens element having ~~at least one substantially planar surface, the lens element being positioned relative to the first element whereby the at least one substantially planar~~ a surface of the lens element is adjacent and substantially parallel to the at least one substantially planar surface of the conical indentation of the first element, the lens element also having a curved surface for focusing light passing through it said curved surface; and

a reflective member positioned adjacent the base of the first element to reflect light from the conical indentation of the first element to the curved surface of the lens element.

~~wherein the first element is circularly symmetrical, having a generally circular base and generally cylindrical shape, and having a conical indentation within the upper portion of the cylinder shape that serves as a TIR element for light approaching at less than the critical angle from around the perimeter of the cylinder.~~

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7. (Currently amended) The optical assembly ~~component~~ of claim 6 wherein the lens element is circularly symmetrical, having a generally cylindrical shape but having a conical end which mates with the conical indentation in the first element and having a lens surface opposite the conical end.
8. (Currently amended) The optical assembly ~~component~~ of claim 6 wherein the end of the generally cylindrical shape of the first element that is opposite to the conical indentation is substantially planar.
9. (Currently amended) The optical assembly ~~component~~ of claim 6 wherein the end of the first element that is opposite to the conical indentation is substantially curved to form a lens surface.
- 23-30. (Canceled)
31. (New) The optical assembly of claim 6 wherein the reflective member is a micromirror array.

Allowable Subject Matter

Claims 6-9 and 31 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Though the prior art discloses a first element and a lens element with most or all of the required features, the prior art of record fails to teach or suggest the aforementioned combination further comprising a reflective member positioned adjacent the base of the first element to reflect light from the conical indentation of the first element to the curved surface of the lens element.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

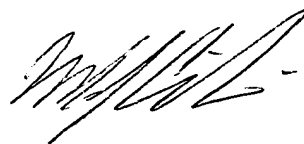
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Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Chen et al. (US Patent No. 6,185,051), Wangler et al. (US Patent No. 5,675,401), Powell (US Patent No. 5,629,808), Mulkens et al. (US Patent No. 6,452,662) are cited as the closest prior art. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Consilvio whose telephone number is (571) 272-2453. The examiner can normally be reached on Monday thru Friday, 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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